

## Case 3258

***Acmaeodera* Eschscholtz, 1829 and *Acmaeoderella* Cobos, 1955  
(Insecta, Coleoptera): proposed conservation of usage by designation  
of *Buprestis cylindrica* Fabricius, 1775 as the type species of  
*Acmaeodera***

C.L. Bellamy

*Plant Pest Diagnostics Lab., California Department of Food & Agriculture,  
3294 Meadowview Road, Sacramento, California 95832, U.S.A.  
(e-mail: cbellamy@cdfa.gov)*

M.G. Volkovitsh

*Zoological Institute, Russian Academy of Sciences, RU-199034  
St. Petersburg, Russia (e-mail: polycest@zin.ru)*

**Abstract.** The purpose of this application, under Article 70.2 of the Code, is to conserve the current usage of the widely used buprestid (jewel beetle) generic names *Acmaeodera* Eschscholtz, 1829 and *Acmaeoderella* Cobos, 1955 (family BUPRESTIDAE) by accepting the designation of *Buprestis cylindrica* Fabricius, 1775 as the type species of *Acmaeodera*. The type species of *Acmaeodera* is at present formally *Buprestis taeniata* Fabricius, 1787 (a junior subjective synonym of *B. flavofasciata* Piller & Mitterpacher, 1783). However, this designation (made in 1841) has been overlooked, and in modern usage *B. cylindrica* has universally been accepted as the type species of *Acmaeodera*. Adoption of *B. taeniata* as type species of *Acmaeodera* would cause great nomenclatural instability as nearly 500 species would be affected by transfer and changes in generic and subgeneric names.

**Keywords.** Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Acmaeodera*; *Acmaeoderella*; *Carininota*; *Acmaeodera cylindrica*; *Acmaeoderella flavofasciata*; jewel beetles.

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1. Eschscholtz (1829, p. 9) introduced the generic name *Acmaeodera* for five nominal species of buprestid beetles (family BUPRESTIDAE): *Buprestis gibbosa* Olivier, 1790, *B. taeniata* Fabricius, 1787 (p. 180), *B. adpersula* (as *adpersa*) Illiger, 1803, *B. ornata* Olivier, 1790, and *B. cylindrica* Fabricius, 1775 (p. 220). None was designated as the type species. *Acmaeodera* now includes 495 species found in all parts of the world except Australasia.

2. Duponchel (1841, p. 88) subsequently designated *B. taeniata* Fabricius, 1787 as the type species of *Acmaeodera*. Desmarest (1860, p. 41) indicated that he considered *B. taeniata* to be the type species of *Acmaeodera*. Starting from the work of Harold (1869, p. 117), *B. taeniata* has been listed as a junior subjective synonym of *B. flavofasciata* Piller & Mitterpacher, 1783 (p. 84) (currently *Acmaeoderella flavofasciata*).

3. Cobos (1955, p. 5) introduced the generic name *Acmaeoderella* and designated *Buprestis discoidea* Fabricius, 1787 (p. 184) as the type species. Later, Cobos (1958) revised the *Acmaeoderini* of Morocco and transferred 21 nominal species of *Acmaeodera* (including *A. flavofasciata*) to *Acmaeoderella*. *Acmaeoderella* currently includes 120 species, all restricted to the Palaearctic region.

4. Volkovitsh (1979, p. 339; see also the 1980 English translation, p. 82) invalidly designated *B. cylindrica* Fabricius, 1775 as the type species of *Acmaeodera*, unaware of the much earlier designation of *B. taeniata* by Duponchel (see para. 2 above). In this work Volkovitsh published a classification for the Palaearctic species of both *Acmaeodera* and *Acmaeoderella*, erecting new subgenera and species groups. *Buprestis flavofasciata* (= *B. taeniata*; see para. 2 above) was designated as the type species of the subgenus *Carininota* Volkovitsh, 1979 (p. 352) in *Acmaeoderella*. *Carininota* and *Buprestis flavofasciata* were placed on Official Lists in Opinion 2008 (BZN 59: 211–216, September 2002). After Cobos (1955, 1958) and Volkovitsh (1979), the names *Acmaeoderella* and *Acmaeodera* have been used in accord with the type designations (valid and invalid respectively) made by these authors and their meanings have been universally accepted (see Bílý, 1977, 1983; Mühle, 1980; Bellamy, 1985; Cobos, 1986; Holynski, 1993; Curletti, 1994; Kolibáč, 2001; Volkovitsh, 2001).

5. Nomenclatural chaos would be caused if Duponchel's type species designation were to be accepted and *B. taeniata* taken to be the type species of *Acmaeodera*. The name *Acmaeodera* would be applied to the 120 exclusively Palaearctic species currently placed in *Acmaeoderella* and its six subgenera, and the taxonomic subgenus now called *Carininota* would become the nominotypical subgenus *Acmaeodera* (*Acmaeodera*) (see para. 4 above and Article 44). The taxon now called *Acmaeoderella* (*Acmaeoderella*), with the type species *B. discoidea*, would become one of the subgenera of *Acmaeodera* with a new subgeneric name. The 495 species (in some 12 subgenera) currently in *Acmaeodera* would be placed in a genus with a name depending on taxonomic view, and the subgenus containing *B. cylindrica* Fabricius would need a new name.

6. To avoid the confusion that would result from over-turning the traditional stability of the genera *Acmaeodera* and *Acmaeoderella*, the type species designation of Duponchel (1841; see para. 2 above) should be set aside and the designation of Volkovitsh (1979; see para. 4 above) should be conserved.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all fixations of type species for the nominal genus *Acmaeodera* Eschscholtz, 1829 before that of *Buprestis cylindrica* Fabricius, 1775 by Volkovitsh (1979);
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Acmaeodera* Eschscholtz, 1829 (gender: feminine), type species *Buprestis cylindrica* Fabricius, 1775 by the fixation of Volkovitsh (1979) as ruled in (1) above;
  - (b) *Acmaeoderella* Cobos, 1955 (gender: feminine), type species by original designation *Buprestis discoidea* Fabricius, 1787;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *cylindrica* Fabricius, 1775, as published in the binomen *Buprestis cylindrica* (specific name of the type species of *Acmaeodera* Eschscholtz, 1829);

(b) *discoidea* Fabricius, 1787, as published in the binomen *Buprestis discoidea* (specific name of the type species of *Acmaeoderella* Cobos, 1955).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).